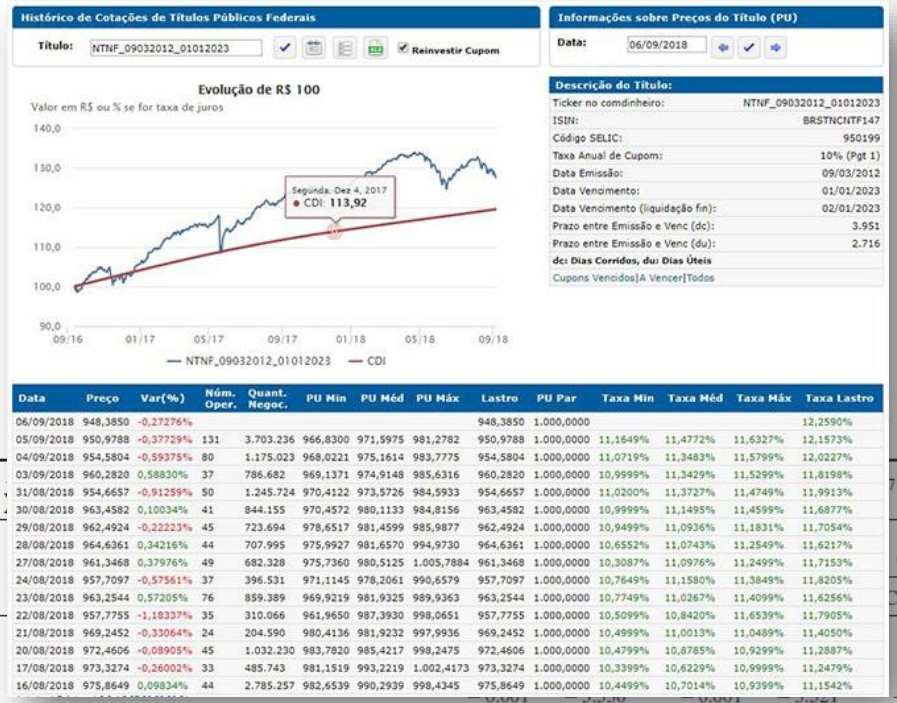
UTILIZAÇÃO DO "R" NAS PESQUISAS EM CONTABILIDADE

PATRÍCIA PAIN

PPGCON UFES
Programa de Pós-graduação em Ciências Contábeis
Mestrado | Doutorado | Pós-doutorado



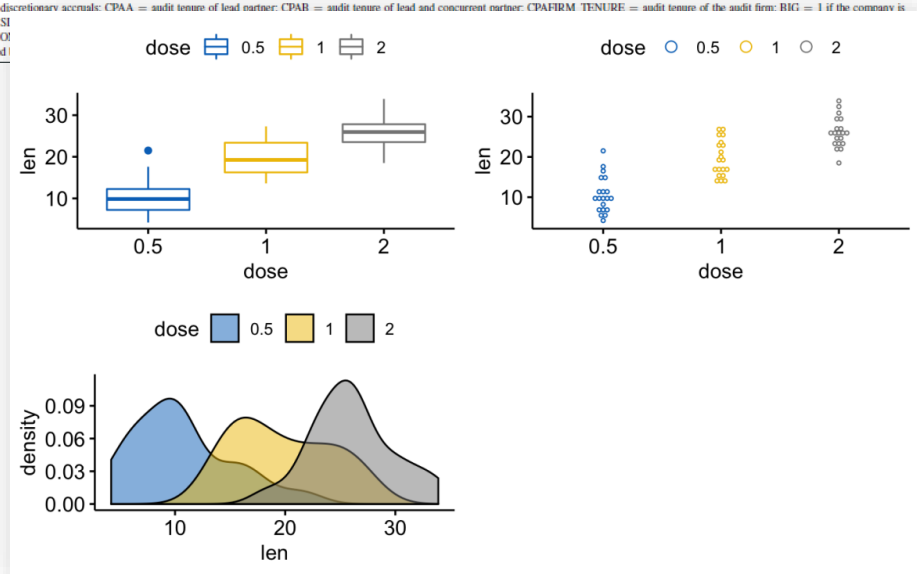
Data	Preço	Var(%)	Núm. Oper.	Quant. Negoc.	PU Min	PU Méd	PU Máx	Lastro	PU Par	Taxa Min	Taxa Méd	Taxa Máx	Taxa Lastro
06/09/2018	948,3850	-0,27276%						948,3850	1.000,0000				12,2590%
05/09/2018	950,9788	-0,37729%	131	3.703.236	966,8300	971,5975	981,2782	950,9788	1.000,0000	11,1649%	11,4772%	11,6327%	12,1573%
04/09/2018	954,5804	-0,59375%	80	1.175.023	968,0221	975,1614	983,7775	954,5804	1.000,0000	11,0719%	11,3483%	11,5799%	12,0227%
03/09/2018	960,2820	0,58830%	37	786.682	969,1371	974,9148	985,6316	960,2820	1.000,0000	10,9999%	11,3429%	11,5299%	11,8198%
31/08/2018	954,6657	-0,91259%	50	1.245.724	970,4122	973,5726	984,5933	954,6657	1.000,0000	11,0200%	11,3727%	11,4749%	11,9913%
30/08/2018	963,4582	0,10034%	41	844.155	970,4572	980,1133	984,8156	963,4582	1.000,0000	10,9999%	11,1495%	11,4599%	11,6877%
29/08/2018	962,4924	-0,22223%	45	723.694	978,6517	981,4599	985,9877	962,4924	1.000,0000	10,9499%	11,0936%	11,1831%	11,7054%
28/08/2018	964,6361	0,34216%	44	707.995	975,9927	981,6570	994,9730	964,6361	1.000,0000	10,6552%	11,0743%	11,2549%	11,6217%
27/08/2018	961,3468	0,37976%	49	682.328	975,7360	980,5125	1.005,7884	961,3468	1.000,0000	10,3087%	11,0976%	11,2499%	11,7153%
24/08/2018	957,7097	-0,57561%	37	396.531	971,1145	978,2061	990,6579	957,7097	1.000,0000	10,7649%	11,1580%	11,3849%	11,8205%
23/08/2018	963,2544	0,57205%	76	859.389	969,9219	981,9325	989,9363	963,2544	1.000,0000	10,7749%	11,0267%	11,4099%	11,6256%
22/08/2018	957,7755	-1,18337%	35	310.066	961,9650	987,3930	998,0651	957,7755	1.000,0000	10,5099%	10,8420%	11,6539%	11,7905%
21/08/2018	969,2452	-0,33064%	24	204.590	980,4136	981,9232	997,9936	969,2452	1.000,0000	10,4999%	11,0013%	11,0489%	11,4050%
20/08/2018	972,4606	-0,08905%	45	1.032.230	983,7820	985,4217	998,2475	972,4606	1.000,0000	10,4799%	10,8785%	10,9299%	11,2887%
17/08/2018	973,3274	-0,26002%	33	485.743	981,1519	993,2219	1.002,4173	973,3274	1.000,0000	10,3399%	10,6229%	10,9999%	11,2479%
16/08/2018	975,8649	0,09834%	44	2.785.257	982,6539	990,2939	998,4345	975,8649	1.000,0000	10,4499%	10,7014%	10,9399%	11,1542%

$ADAC_{kt} = (1 + \ldots + \ldots CHANGE_{kt})$

Variables	CPAB & CPAFIRM_TENURE	
	Coefficient	*t*-value
INTERCEPT	0.120	6.334***
CPAA		
CPAB	0.001	0.888
CPAFIRM_TENURE	− 0.001	− 3.616***
BIG	0.001	0.527
SIZE	− 0.003	− 4.400***
GROW	0.029	10.118***
CFO	− 0.092	− 2.910**
AGE	− 0.001	− 9.164***
CHANGE	− 0.004	− 1.159
ROTATION	0.032	1.612
CPAA × ROTATION		
CPAB × ROTATION	− 0.002	− 2.830**
CPAFIRM_TENURE × ROTATION	0.001	1.429
BIG × ROTATION	− 0.009	− 2.349*
SIZE × ROTATION	− 0.001	− 1.148
GROW × ROTATION	− 0.002	− 0.572
CFO × ROTATION	0.020	0.595
AGE × ROTATION	0.001	2.734**
CHANGE × ROTATION	− 0.002	− 0.630
INDUSTRY_DUMMIES	Included	
N	14,561	
Adj. R^2	0.171	
F	87.0873	

Variables	CPAA		CPAB		CPAFIRM_TENURE		CPAA & CPAFIRM_TENURE		CPAB & CPAFIRM_TENURE	
	Coefficient	*t*-value	Coefficient	*t*-value	Coefficient	*t*-value	Coefficient	*t*-value	Coefficient	*t*-value
INTERCEPT	0.178	8.773***	0.180	8.869***	0.161	7.651***	0.161	7.643***	0.161	7.621***
CPAA	− 0.001	− 0.912					− 0.001	− 0.242		
CPAB			− 0.001	− 0.184					0.001	0.268
CPAFIRM_TENURE					− 0.001	− 3.171***	− 0.001	− 2.843***	− 0.001	− 3.077***
BIG	− 0.001	− 0.119	− 0.001	− 0.047	− 0.001	− 0.435	− 0.001	− 0.393	− 0.001	− 0.370
SIZE	− 0.003	− 3.501***	− 0.003	− 3.645***	− 0.002	− 2.371**	− 0.002	− 2.376**	− 0.002	− 2.385**
GROW	0.028	16.087***	0.028	16.151***	0.028	15.633***	0.027	15.621***	0.028	15.635***
CFO	− 0.081	− 10.269***	− 0.081	− 10.267***	− 0.081	− 10.257***	− 0.081	− 10.261***	− 0.081	− 10.255***
AGE	− 0.001	− 12.213***	− 0.001	− 12.403***	− 0.001	− 10.993***	− 0.001	− 10.960***	− 0.001	− 10.981***
CHANGE	− 0.003	− 1.100	− 0.003	− 1.020	− 0.005	− 1.640	− 0.005	− 1.618	− 0.005	− 1.597
ROTATION	0.028	1.400	0.026	1.331	0.033	1.593	0.037	1.815*	0.037	1.797*
CPAA × ROTATION	− 0.001	− 2.903***					− 0.001	− 2.989***		
CPAB × ROTATION			− 0.001	− 2.428**					− 0.002	− 2.485**
CPAFIRM_TENURE × ROTATION					0.001	1.758*	0.001	1.745*	0.001	1.816*
BIG × ROTATION	− 0.010	− 3.144***	− 0.010	− 3.265***	− 0.009	− 2.781***	− 0.009	− 2.846***	− 0.009	− 2.910***
SIZE × ROTATION	− 0.001	− 0.881	− 0.001	− 0.816	− 0.001	− 1.344	− 0.001	− 1.383	− 0.001	− 1.376
GROW × ROTATION	− 0.002	− 0.957	− 0.002	− 0.937	− 0.001	− 0.756	− 0.001	− 0.808	− 0.001	− 0.779
CFO × ROTATION	0.013	1.404	0.013	1.414	0.013	1.409	0.013	1.396	0.013	1.401
AGE × ROTATION	0.001	3.388***	0.001	3.474***	0.001	2.903***	0.001	2.887***	0.001	2.904***
CHANGE × ROTATION	0.001	0.090	0.001	0.006	0.001	0.259	0.001	0.337	0.001	0.275
INDUSTRY_DUM	Included		Included		Included		Included		Included	
AIC	− 36,857.923		− 36,850.269		− 36,850.823		− 36,834.431		− 36,828.763	
Log likelihood	− 36,899.923		− 36,892.269		− 36,892.823		− 36,880.431		− 36,874.763	
Chi-square	1291.601***		1282.951***		1286.820***		1301.693***		1295.047***	
The proportional change in variance										
Firm	0.372		0.372		0.380		0.379		0.380	
Audit firm	0.416		0.430		0.431		0.425		0.436	
Audit partner	0.720		0.747		0.732		0.694		0.712	
Marginal r^2	0.117		0.117		0.118		0.118		0.118	
Conditional r^2	0.263		0.263		0.262		0.263		0.262	

Notes: ADAC = the absolute value of discretionary accruals; CPAA = audit tenure of lead partner; CPAB = audit tenure of lead and concurrent partner; CPAFIRM_TENURE = audit tenure of the audit firm; BIG = 1 if the company is audited by a Big4 auditor, otherwise 0; SI
company has been established; ROTATIO
the 1%, 5%, and 10% levels are indicated



Notes: Standard errors are cluster by firm and year. ADAC = the absolute value of discretionary accruals; CPAA = audit tenure of lead partner; CPAB = audit tenure of lead and concurrent partner: CPAFIRM_TENURE = audit tenure of the audit firm; BIG = 1 if the company is audited by a Big4 auditor, otherwise 0; SIZE = natural logarithm of total assets; GROW = net sales at year *t* divided by net sales at year *t* − 1; CFO = net operating cash flow divided by lagged total assets; AGE = number of years the company has been established. ROTATION = 0 if year is 2000–2003 and = 1 if year is 2004–2011; CHANGE = 1 for all audit clients if an audit partner switched audit firms during the sample period, otherwise 0. Significance (two tailed) at the 1%, 5%, and 10% levels are indicated by ***, **, and *, respectively.

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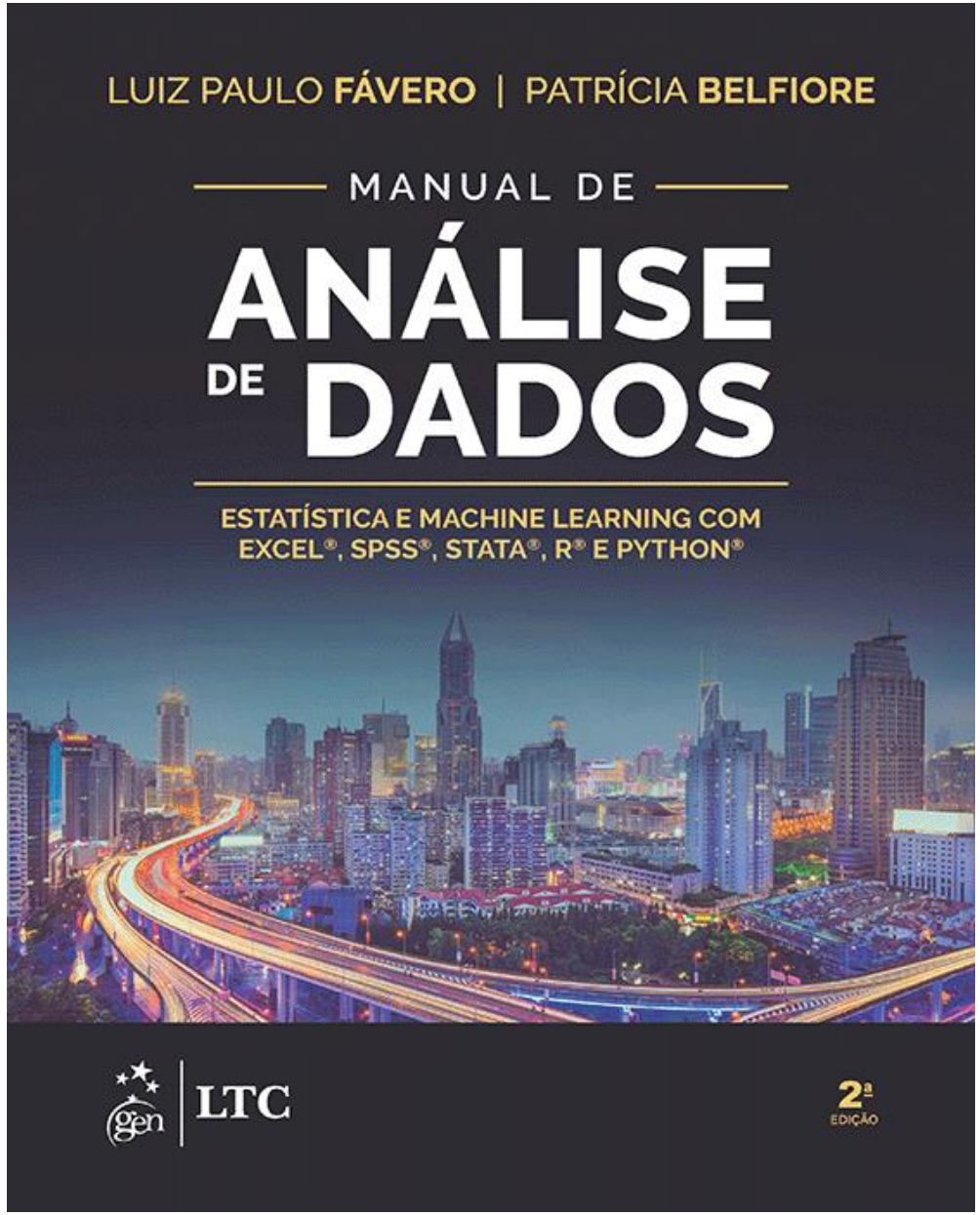

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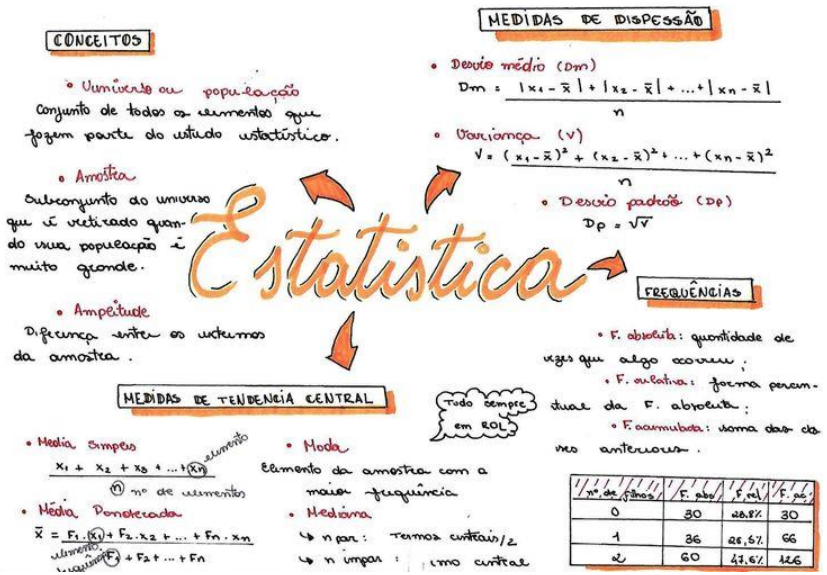
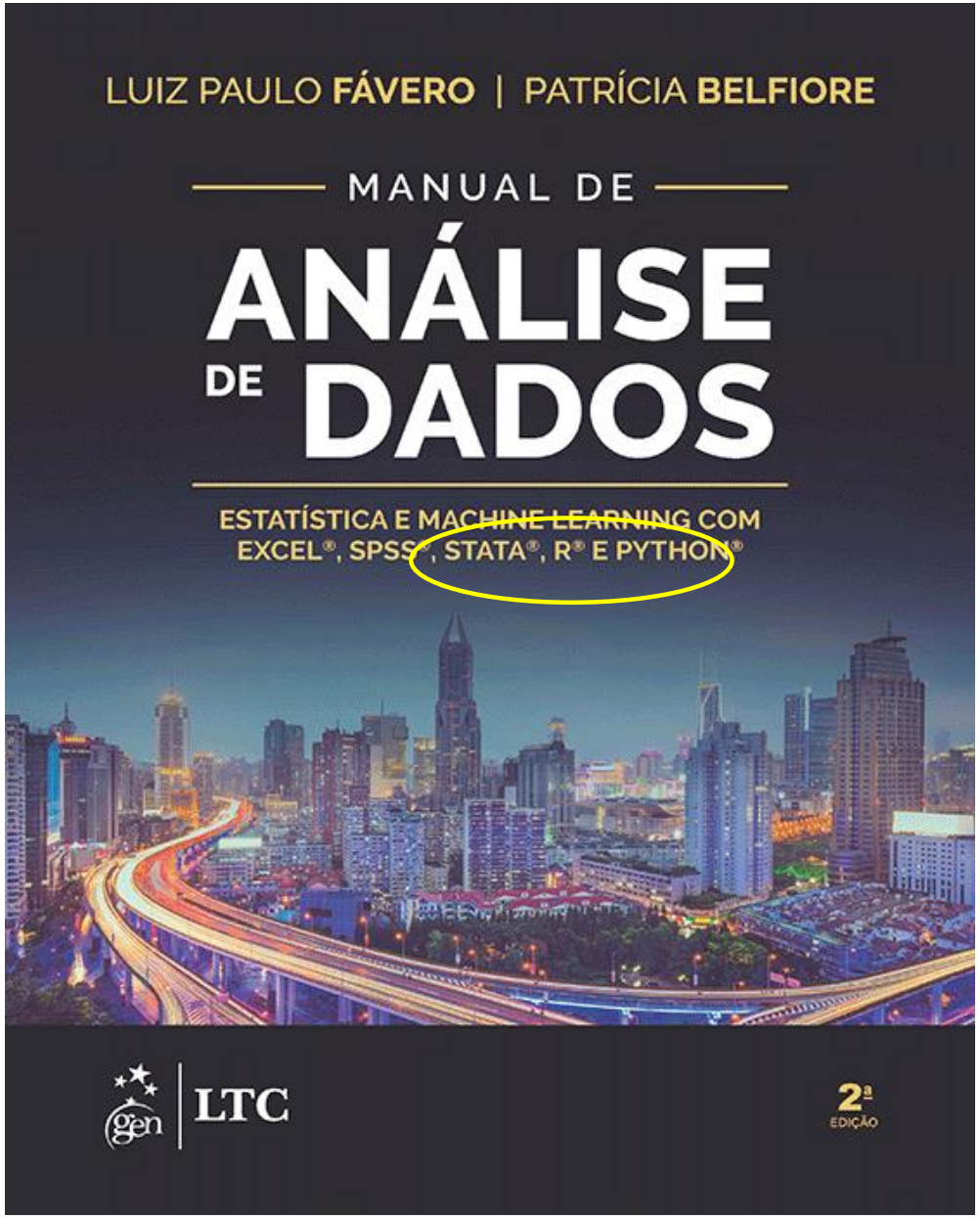

CONCEITOS
• Universo ou população
Conjunto de todos os elementos que fazem parte do estudo estatístico.
• Amostra
Subconjunto do universo que é retirado quando uma população é muito grande.
• Amplitude
Diferença entre os extremos da amostra.
Estatística
MEDIDAS DE DISPERSÃO
• Desvio médio (Dm)
Dm = |x1 - x̄| + |x2 - x̄| + ... + |xn - x̄| / n
• Variança (V)
V = (x1 - x̄)² + (x2 - x̄)² + ... + (xn - x̄)² / n
• Desvio padrão (Dp)
Dp = √V
FREQUÊNCIAS
• F. absoluta: quantidade de vezes que algo ocorreu;
• F. relativa: forma percentual da F. absoluta;
• F. acumulada: soma das dos anteriores.
MEDIDAS DE TENDÊNCIA CENTRAL
Todo sempre em ROL
• Média Simples
x1 + x2 + x3 + ... + xn / n
• Média Ponderada
x̄ = F1.x1 + F2.x2 + ... + Fn.xn / F1 + F2 + ... + Fn
• Moda
Elemento da amostra com a maior frequência
• Mediana
↳ n par: termos centrais/2
↳ n ímpar: termo central
nº de filhos | F. abs | F. rel | F. ac
0 | 30 | 28,8% | 30
1 | 36 | 25,6% | 66
2 | 60 | 47,6% | 126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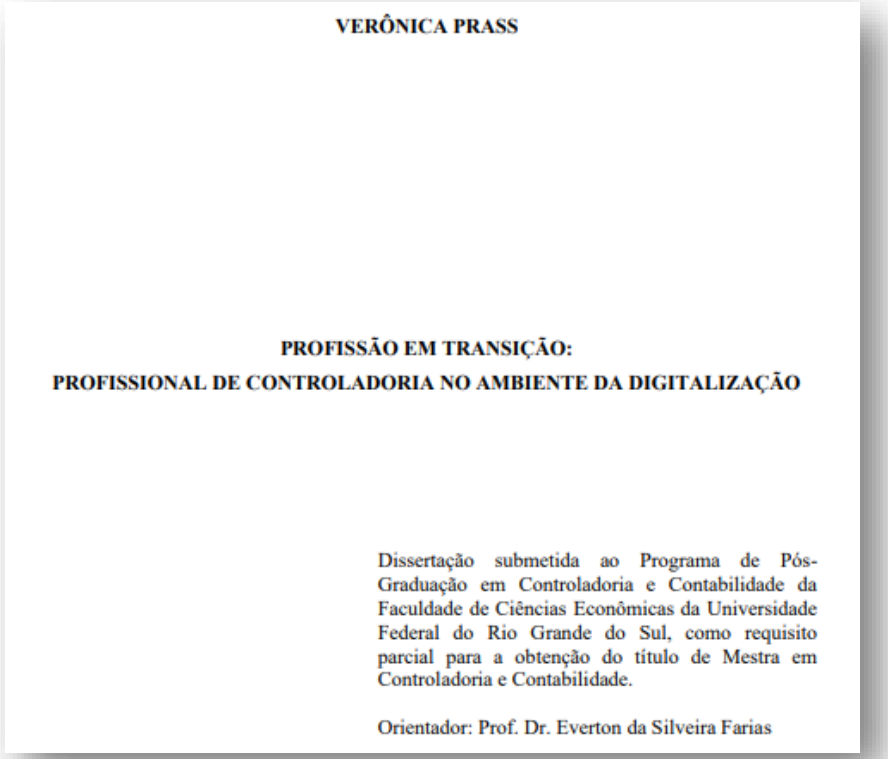
2ª EDIÇÃO

“SOU DA LINHA 2”
“MINHA PESQUISA É QUALITATIVA”
“NÃO VOU USAR DADOS SECUNDÁRIOS”

- Survey
- Questionário – Google Forms
- Modelagem por Equações Estruturais
- PLS-SEM (*Partial least squares*)
- Regressão Logit/OLS



VERÔNICA PRASS

PROFISSÃO EM TRANSIÇÃO:
PROFISSIONAL DE CONTROLADORIA NO AMBIENTE DA DIGITALIZAÇÃO

Dissertação submetida ao Programa de Pós-Graduação em Controladoria e Contabilidade da Faculdade de Ciências Econômicas da Universidade Federal do Rio Grande do Sul, como requisito parcial para a obtenção do título de Mestra em Controladoria e Contabilidade.

Orientador: Prof. Dr. Everton da Silveira Farias

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“SOU DA LINHA 2”
“MINHA PESQUISA É QUALITATIVA”
“NÃO VOU USAR DADOS SECUNDÁRIOS”

- Survey
- Questionário – Google Forms
- Modelagem por Equações Estruturais
- PLS-SEM (*Partial least squares*)
- Regressão Logit/OLS

A OPINIÃO DO AUDITOR IMPORTA? UM ESTUDO EXPERIMENTAL SOBRE O IMPACTO NA DECISÃO DOS INVESTIDORES NÃO INSTITUCIONAIS

Table 2: Results from Experiment 2

	(1)	(2)	(3)	(4)
	Any Entry Errors	Correction Errors	Any Entry errors × Attention	Correction errors × Attention
Private	1.159	0.955	0.622	1.020
	(0.235)	(0.144)	(0.181)	(0.220)
	[.467]	[.758]	[.103]	[.928]
Active	0.748	1.085	0.413**	1.155
	(0.151)	(0.164)	(0.119)	(0.243)
	[.151]	[.589]	[.002]	[.493]
Private × active			3.364**	0.879
			(1.373)	(0.265)
			[.003]	[.669]
lnalpha		1.699***		1.698***
		(0.204)		(0.204)
		[.000]		[.000]
Observations	405	405	405	405
Pseudo R^2	0.004	0.000	0.021	0.000
Model	Logit	Neg bin	Logit	Neg bin

Notes: Exponentiated coefficients, standard errors in parentheses, *p*-values in square brackets.
$^{*}p < .1$, $^{**}p < .05$, $^{***}p < .01$, $^{****}p < .001$.

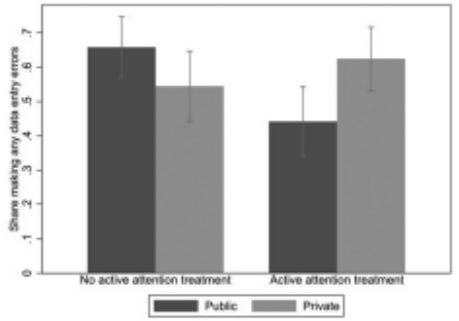

Figure 4: Proportion Making Any Data Entry Errors by Public/Private Ownership Status by Active/Passive Attention.

of the public/private treatment on the number of correction errors.

Alternative specifications for both dependent variables (i.e., number of entry errors and any correction errors) are provided in Table A6 in the Appendix. Similar to experiment 1, there was attrition of workers during the work task. This is assessed in Appendix Table A4 and shows no differential attrition between experimental groups. In the same way, as for experiment 1, we report the characteristics of the workers in experiment 2 and ran balance checks. These are reported in Table A2 in the Appendix, the minor differences reaching statistical significance on three of the variables in the balance checks are no more than would be expected by chance when running 27 statistical balance checks across the experiments.

Exploratory Analyses

We undertook an exploratory analysis of relationships between attention paid by workers in the first experiment and

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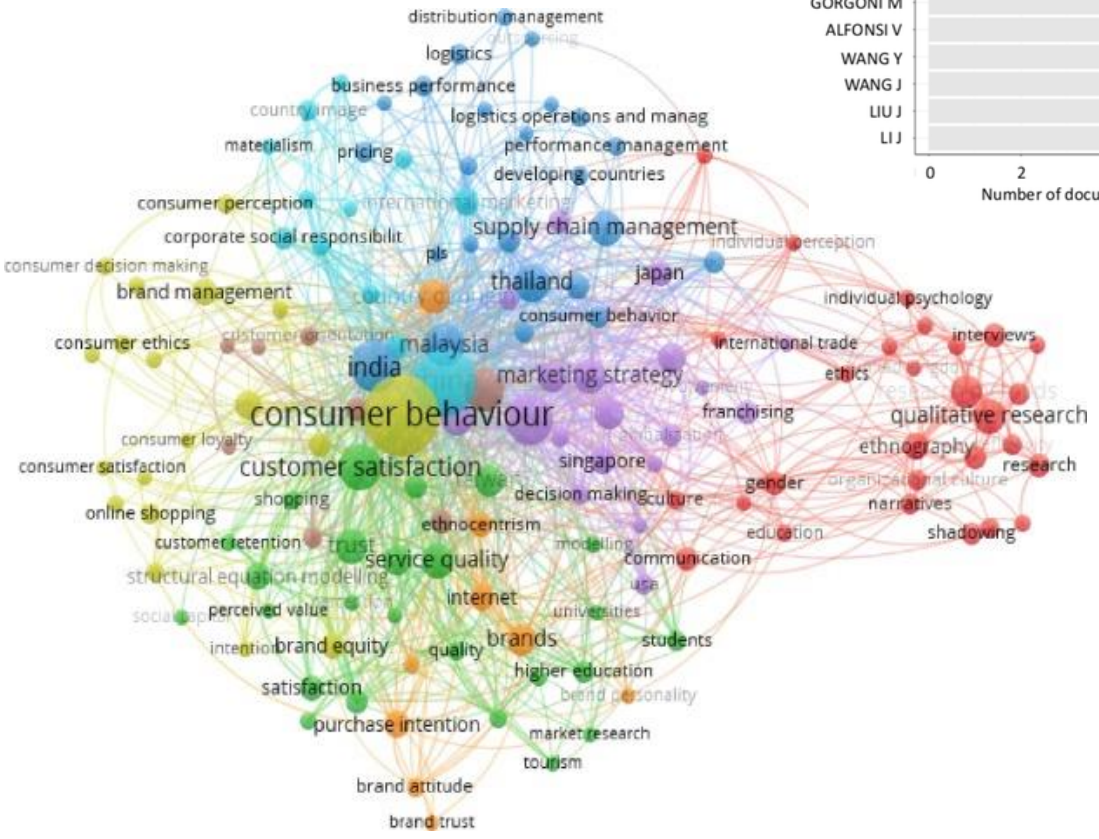

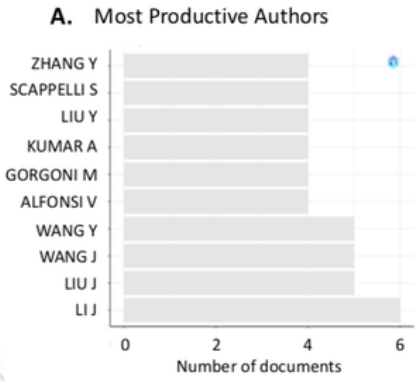

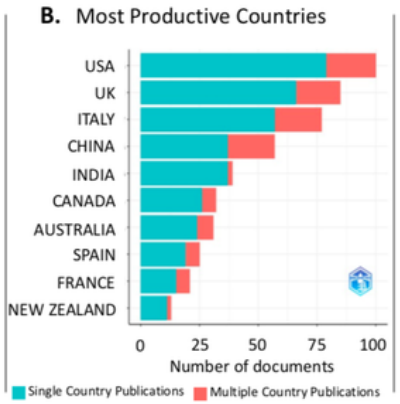

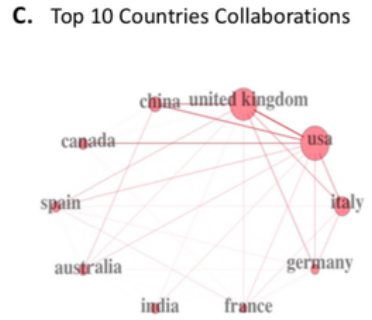

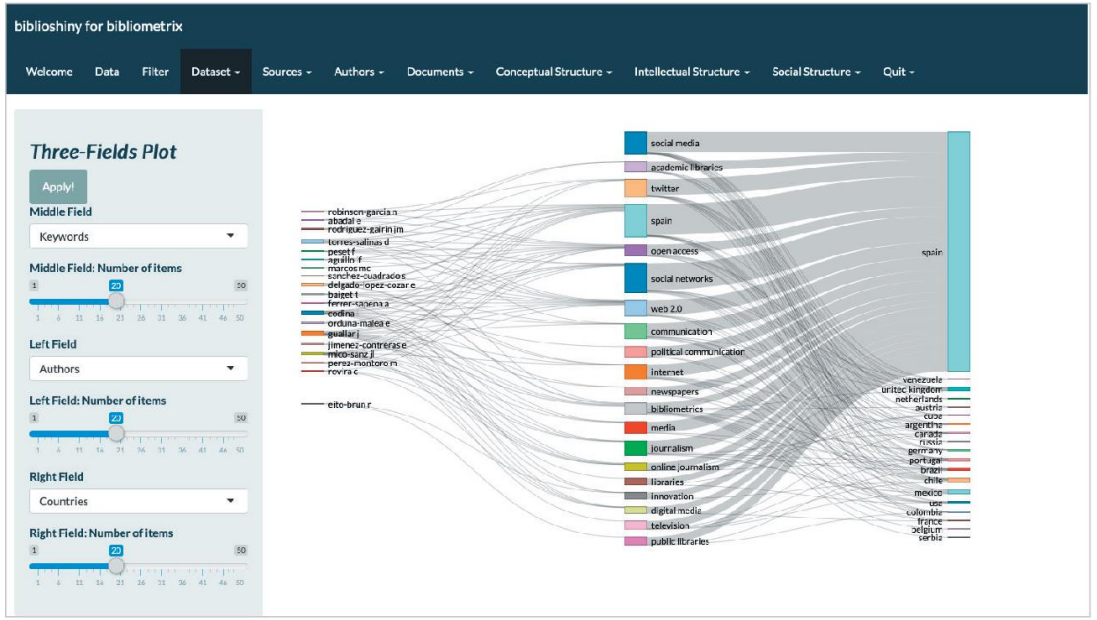

QUE TAL O BIBLIOMETRIX?

- https://qualimetria.paginas.ufsc.br/files/2019/07/Rmeetup_Bibliometrix_Icaro.pdf

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Regular article

bibliometrix: An R-tool for comprehensive science mapping analysis

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ABSTRACT

The use of bibliometrics is gradually extending to all disciplines. It is particularly suitable for science mapping at a time when the emphasis on empirical contributions is producing voluminous, fragmented, and controversial research streams. Science mapping is complex and unwieldly because it is multi-step and frequently requires numerous and diverse software tools, which are not all necessarily freeware. Although automated workflows that integrate these software tools into an organized data flow are emerging, in this paper we propose a unique open-source tool, designed by the authors, called *bibliometrix*, for performing comprehensive science mapping analysis. *bibliometrix* supports a recommended workflow to perform bibliometric analyses. As it is programmed in R, the proposed tool is flexible and can be rapidly upgraded and integrated with other statistical R-packages. It is therefore useful in a constantly changing science such as bibliometrics.

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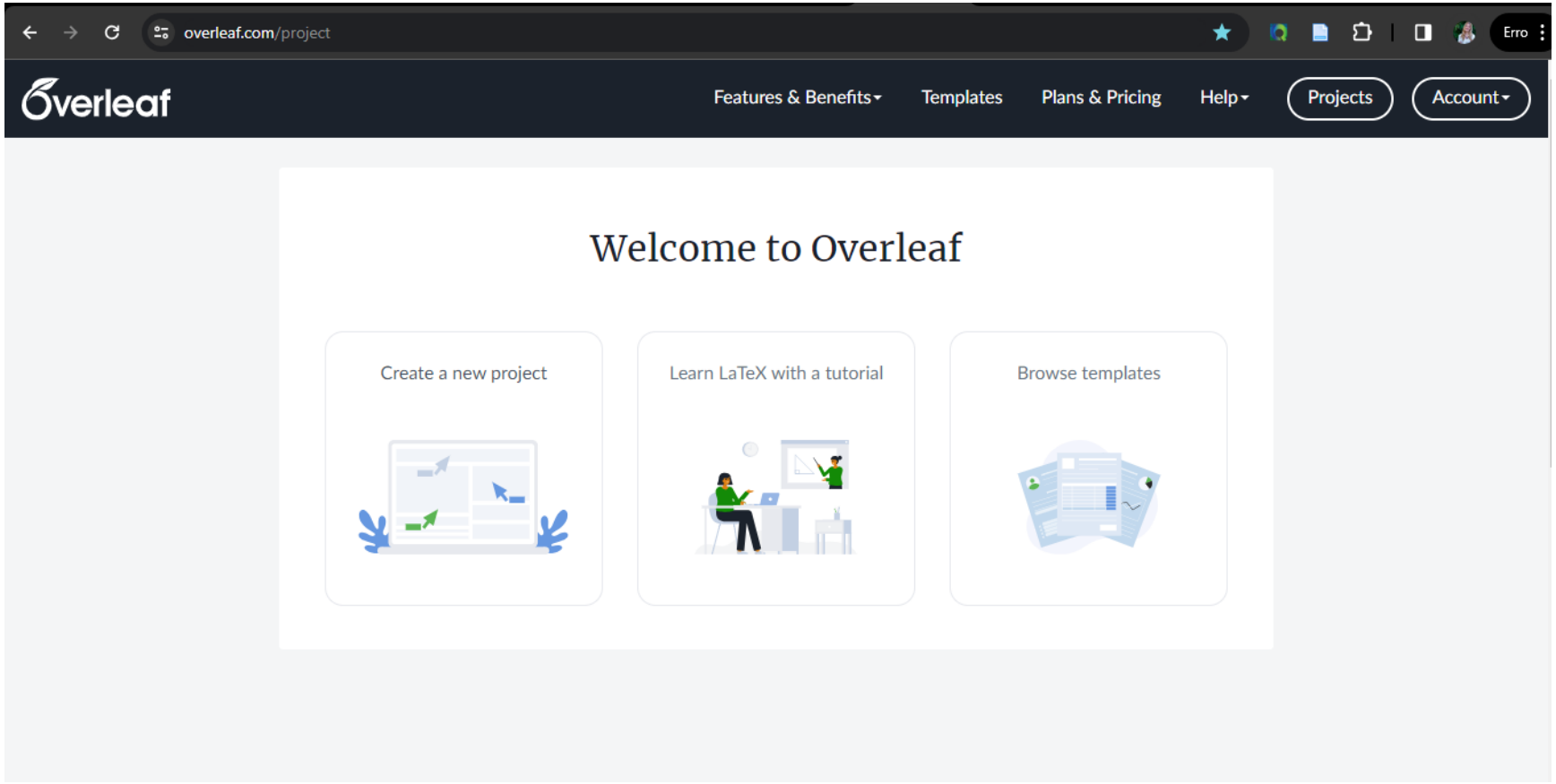

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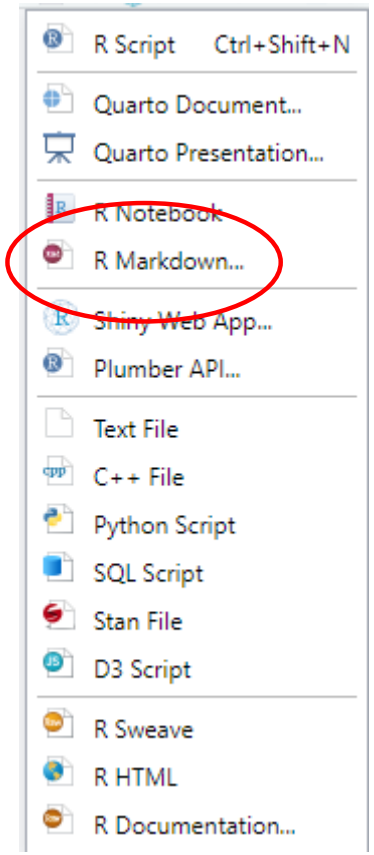


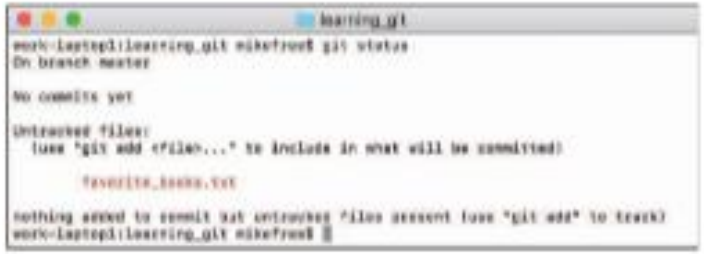


Figure 3.2 The status of a repository with changes that have not (yet) been added and are therefore shown in red.

The first step is to add those changes to the **staging area**. The staging area is like a shopping cart in an online store: you put changes in temporary storage before you commit to recording them in the database (e.g., before clicking "purchase").

You add files to the staging area using the **`git add`** command (replacing `FILENAME` in the following example with the name/path of the file or folder you want to add):

```
# Add changes to a file with the name FILENAME to the staging area
# Replace FILENAME with the name of your file (e.g., favorite_books.txt)
git add FILENAME
```

This will add a single file in its *current unsaved state* to the staging area. For example, `git add favorite_books.txt` would add that file to the staging area. If you change the file later, you will need to add the updated version by running the `git add` command again.

You can also add all of the contents of the current directory (tracked or untracked) to the staging area with the following command:

```
# Add all saved contents of the directory to the staging area
git add .
```

This command is the most common way to add files to the staging area, unless you've made changes to specific files that you aren't ready to commit yet. Once you've added files to the staging area, you've "changed" the repo and so can run `git status` again to see what it says to do next. As you can see in Figure 3.3, `git` will tell you which files are in the staging area, as well as the command to unstage those files (i.e., remove them from the "cart").

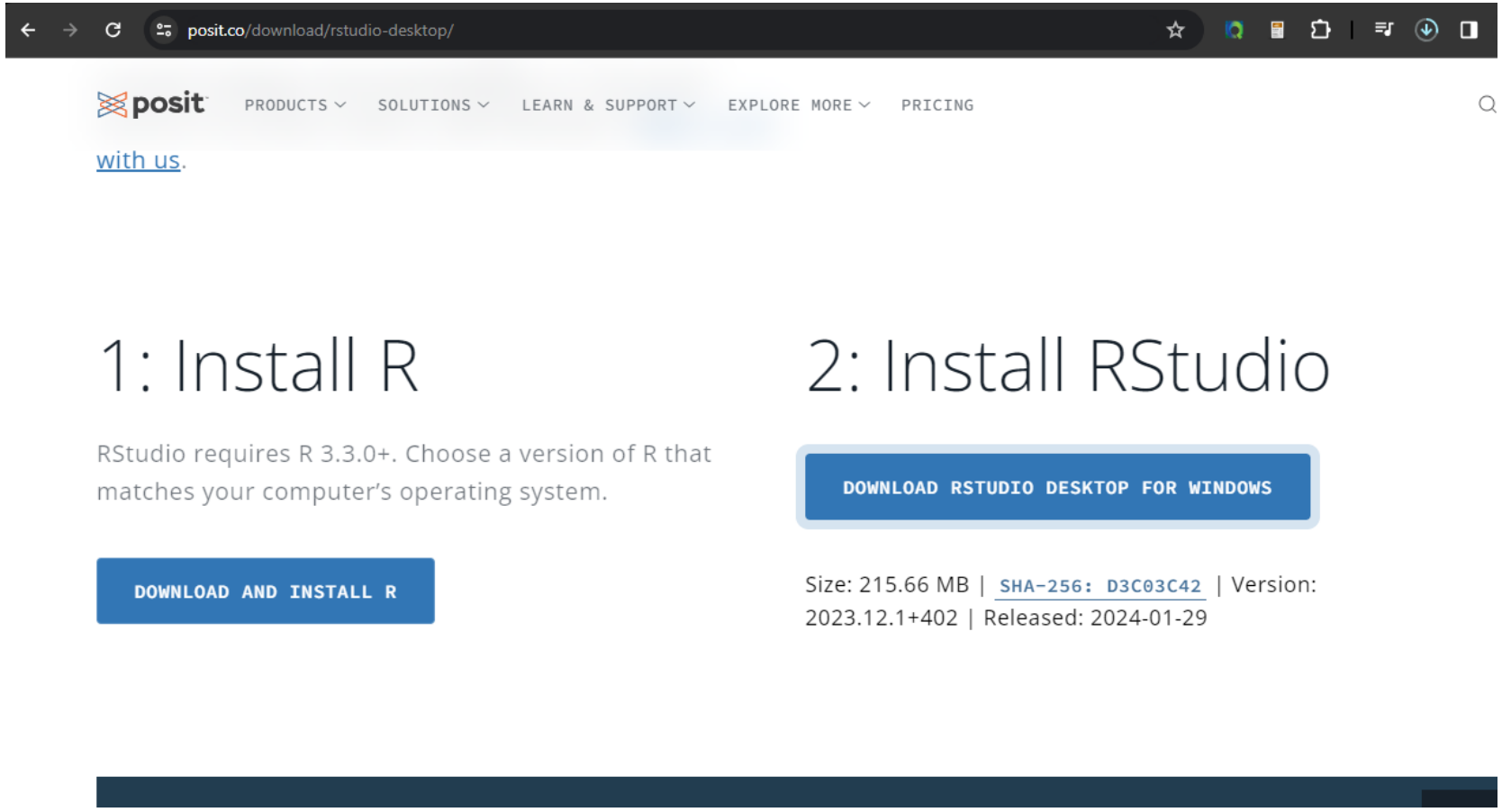
3.3.2 Committing

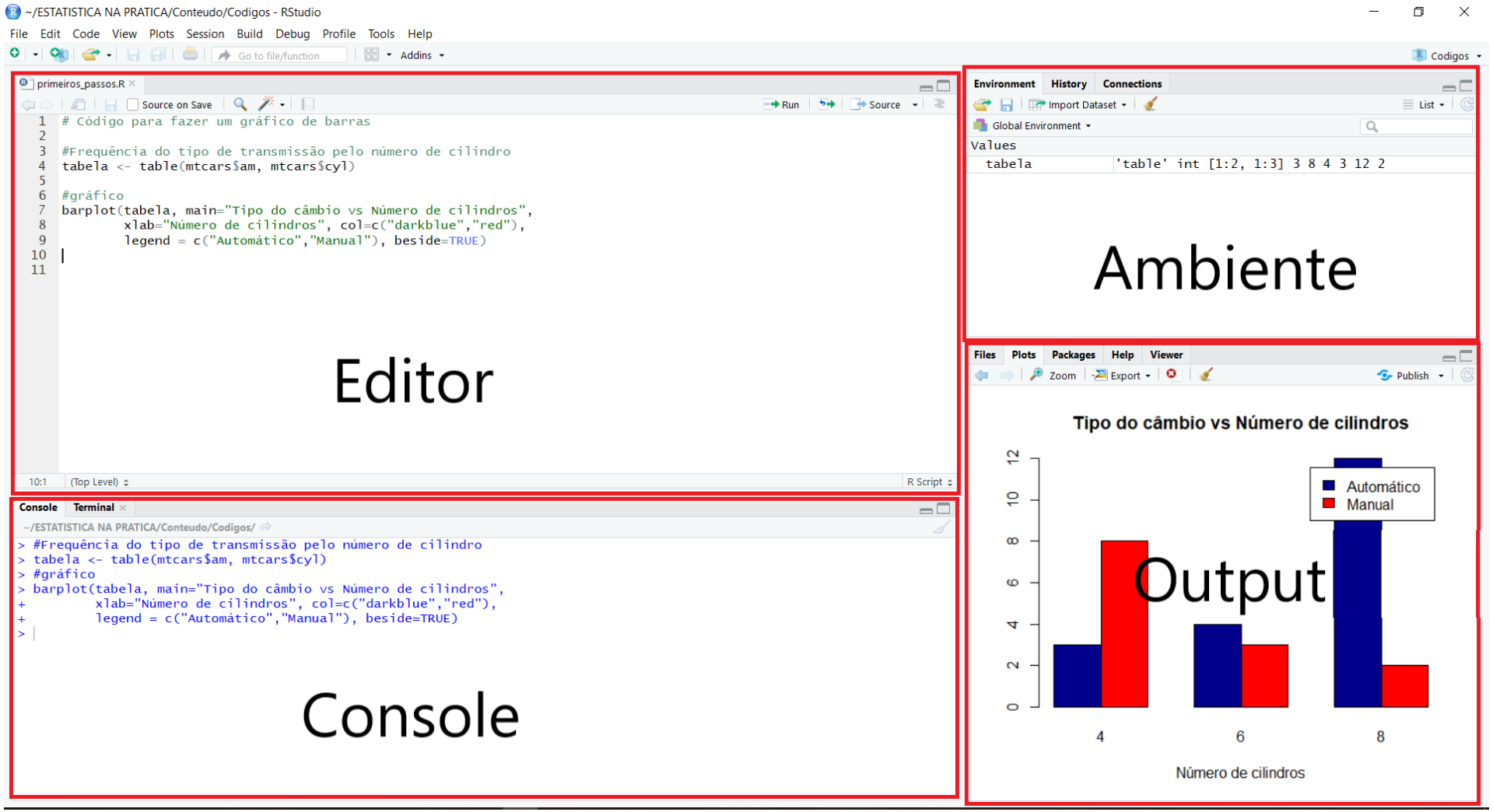
When you're happy with the contents of your staging area (i.e., you're ready to purchase), it's time to **commit** those changes, saving that snapshot of the files in the repository database. You do this with the **`git commit`** command:

```
# Create a commit (checkpoint) of the changes in the staging area
# Replace "Your message here" with a more informative message
git commit -m "Your message here"
```

INSTALAÇÃO DO R E R STUDIO

https://posit.co/download/rstudio-desktop/



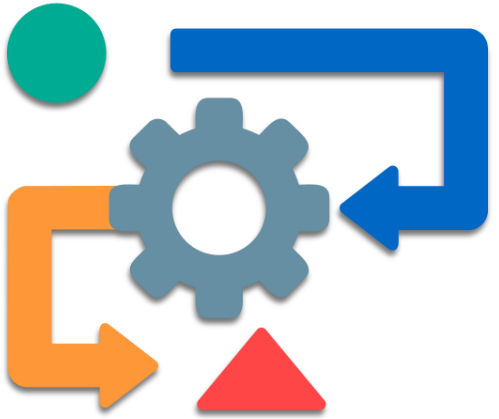

~/ESTATISTICA NA PRATICA/Conteudo/Codigos - RStudio
File Edit Code View Plots Session Build Debug Profile Tools Help
Addins
Codigos
primeiros_passos.R
Source on Save
Run
Source
1 # Código para fazer um gráfico de barras
2
3 #Frequência do tipo de transmissão pelo número de cilindro
4 tabela <- table(mtcars$am, mtcars$cyl)
5
6 #gráfico
7 barplot(tabela, main="Tipo do câmbio vs Número de cilindros",
8 xlab="Número de cilindros", col=c("darkblue","red"),
9 legend = c("Automático","Manual"), beside=TRUE)
10
11
Editor
10:1 (Top Level) R Script
Console Terminal
~/ESTATISTICA NA PRATICA/Conteudo/Codigos/
> #Frequência do tipo de transmissão pelo número de cilindro
> tabela <- table(mtcars$am, mtcars$cyl)
> #gráfico
> barplot(tabela, main="Tipo do câmbio vs Número de cilindros",
+ xlab="Número de cilindros", col=c("darkblue","red"),
+ legend = c("Automático","Manual"), beside=TRUE)
>
Console
Environment History Connections
Import Dataset
List
Global Environment
Values
tabela 'table' int [1:2, 1:3] 3 8 4 3 12 2
Ambiente
Files Plots Packages Help Viewer
Zoom
Export
Publish
Tipo do câmbio vs Número de cilindros
Automático
Manual
0 2 4 6 8 10 12
4 6 8
Número de cilindros
Output

PRIMEIROS PASSOS DE UMA PESQUISA

PPGCON UFES
Programa de Pós-graduação em Ciências Contábeis
Mestrado | Doutorado | Pós-doutorado

Ideia de Pesquisa

Estudo da Literatura



Definição da Metodologia

PERGUNTAS QUE PRECISAM DE RESPOSTA **ANTES** DE IR PARA A ANÁLISE

- Qual o método?
- Qual(is) Variável(is) Explicada(s)?
- Quais Variáveis Explicativas?
- O que preciso controlar?

PERGUNTAS QUE PRECISAM DE RESPOSTA **ANTES** DE IR PARA A ANÁLISE

- Qual o método?
- Qual(is) Variável(is) Explicada(s)?
- Quais Variáveis Explicativas?
- O que preciso controlar?

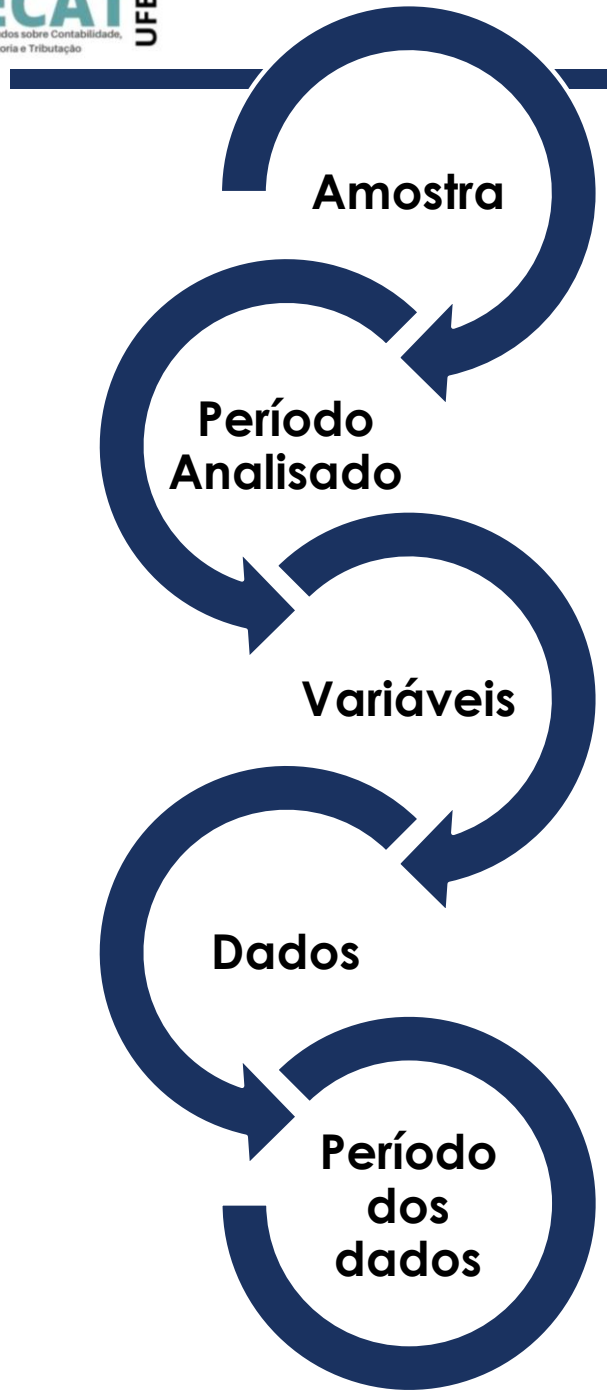
Onde encontrar as respostas?

PERGUNTAS QUE PRECISAM DE RESPOSTA **ANTES** DE IR PARA A ANÁLISE

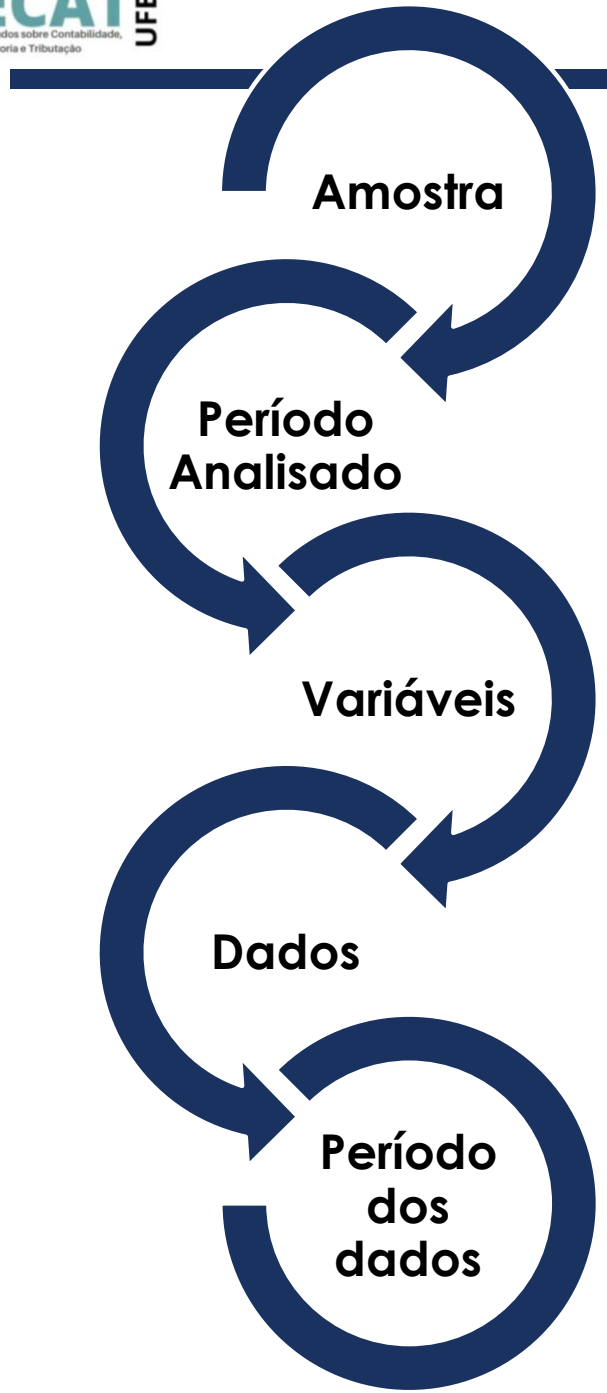
- Qual o método?
- Qual(is) Variável(is) Explicada(s)?
- Quais Variáveis Explicativas?
- O que preciso controlar?

Na literatura!

Aquela mesma que você estudou (ou deveria ter estudado) no passo anterior!



Definiu tudo isso?



PRÓXIMO PASSO: COLETA DE DADOS

REFINITIV

comdinheiro
Nelogica

Economatica
Uma empresa TC

The Dataverse® Project

JÁ POSSO IR PARA A ANÁLISE?

Precisamos olhar para os dados antes!

TRATAMENTO DE DADOS

Ou seja

R Studio®

TRATAMENTO DE DADOS

É PRECISO:

- Tempo
- Paciência
- Planejamento
- Saber onde procurar
- Exemplos

The Dataverse® Project

https://doi.org/10.7910/DVN/9JAATO

TRATAMENTO DE DADOS NO R

GECAT UFES
Grupo de Estudos sobre Contabilidade, Auditoria e Tributação

OFICINAS **GECAT** DE 2023

HTTPS://WWW.YOUTUBE.COM/@GECAT_UFES

Tema
3 Tratamento de dados contábeis e financeiros (data wrangling).
4 Testes de Hipóteses.
5 Análise de Correlação e Análise de Correspondência.
6 Análise de Regressão (Cross-section).
7 Análise de Regressão (Painel).
8 Análise de Regressão (Logistica, Poisson, Binomial Negativa).
9 Outros modelos de regressão (Diferença em Diferenças e Regressão Descontinua).
10 Regressão Multinível.
11 Introdução ao RMarkdown.
12 APA (6ª e 7ª edição- o que mudou e o que manteve).

Não usa o R porque não dá pra fazer tudo que você precisa?

Nos desafiem a provar que dá sim!

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